Application No. 10/783,037 Reply to Office Action May 16, 2006

## Amendments to the Claims:

The following listing of claims replaces all prior versions, and listings, of claims in the application:

## **Listing of Claims**:

- 1. (previously presented) A method of cooling a material, said method comprising compressing a refrigerant consisting essentially of 1,1,1,3,3-pentafluorobutane in a turbocompressor, and allowing the compressed 1,1,1,3,3-pentafluorobutane to expand in heat exchange relation with the material to be cooled.
- 2. (previously presented) A method of converting a cooling system including a turbocompressor which uses R11 or R123 as a refrigerant, said method comprising replacing the R11 or R123 with 1,1,1,3,3-pentafluorobutane so that the refrigerant consists essentially of 1,1,1,3,3-pentafluorobutane and increasing the rotational speed of the turbocompressor.
- 3. (original) A method according to claim 2, wherein the rotational speed is increased by about 4%.
- 4. (previously presented) In a cooling system comprising a turbocompressor which compresses a refrigerant, the improvement comprising said refrigerant consisting essentially of 1,1,1,3,3-pentafluorobutane.
- 5. (previously presented) A cooling system comprising a turbocompressor which compresses a refrigerant, wherein said turbocompressor is designed to operate with R11 or R123 as refrigerant, and wherein said refrigerant consists of 1,1,1,3,3-pentafluorobutane.

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6. (new) A method of cooling a material, said method comprising compressing a refrigerant consisting essentially of 1,1,1,3,3-pentafluorobutane and at least one fluorocarbon selected from the group consisting of R245fa and R245ca in a turbocompressor, and allowing the compressed 1,1,1,3,3-pentafluorobutane to expand in heat exchange relation with the material to be cooled.

7. (new) A method of converting a cooling system including a turbocompressor which uses R11 or R123 as a refrigerant, said method comprising replacing the R11 or R123 with 1,1,1,3,3-pentafluorobutane and at least one fluorocarbon selected from the group consisting of R245fa and R245ca so that the refrigerant consists essentially of 1,1,1,3,3-pentafluorobutane and said at least one fluorocarbon selected from the group consisting of R245fa and R245ca, and increasing the rotational speed of the turbocompressor.

8. (new) A method according to claim 7, wherein the rotational speed is increased by about 4%.

9. (new) In a cooling system comprising a turbocompressor which compresses a refrigerant, the improvement comprising said refrigerant consisting essentially of 1,1,1,3,3-pentafluorobutane and at least one fluorocarbon selected from the group consisting of R245fa and R245ca.

10. (new) A cooling system comprising a turbocompressor which compresses a refrigerant, wherein said turbocompressor is designed to operate with R11 or R123 as refrigerant, and wherein said refrigerant consists of 1,1,1,3,3-pentafluorobutane and at least one fluorocarbon selected from the group consisting of R245fa and R245ca.